UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

March 3, 2014

Kimberly D. Bose,
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 204268

RE: Cameron LNG, LLC and Cameron Interstate Pipeline Draft Environmental Impact Statement (DEIS)

Dear Ms. Bose:

In accordance with our responsibilities under Section 309 of the Clean Air Act (CAA), the National Environmental Policy Act (NEPA), and the Council on Environmental Quality (CEQ) regulations for implementing NEPA, the U.S. Environmental Protection Agency (EPA) Region 6 office in Dallas, Texas, has completed its review of the Draft Environmental Impact Statement (DEIS) prepared by the Federal Energy Regulatory Commission (FERC) for the Cameron Liquefaction Project (Project), proposed by Cameron LNG, LLC and Cameron Interstate Pipeline, LLC (collectively Cameron). Cameron requests authorization to export 12 million tons of liquefied natural gas (LNG) per year from its terminal in Cameron and Calcasieu Parishes, Louisiana.

Based on our review, we have rated the DEIS as "Environmental Concerns - Insufficient Information" (EC-2); additional information on EPA's rating system can be found at http://www.epa.gov/compliance/nepa/comments/ratings.html. We have enclosed detailed comments that identify our concerns and recommendations for additional analysis for the Final EIS (FEIS).

EPA appreciates the opportunity to review the DEIS. Please send our office one copy of the FEIS when it is filed using our *e-NEPA Electronic Filing System* at http://www.epa.gov/compliance/nepa/submiteis/index.html. Please note that a copy of this letter will be published on our website, http://www.epa.gov/compliance/nepa/eisdata.html, in order to fulfill our responsibility under Section 309 of the CAA to inform the public of our views on the proposed Federal action. If you have any questions or concerns, please contact Rhonda Smith or Michael Jansky of my staff at (214) 665-8006 or (214) 665-7438 or via email at smith.rhonda@epa.gov or jansky.michael@epa.gov respectively for assistance.

Sincerely,

Debra A. Griffin
Associate Director
Compliance Assurance and
Enforcement Division

Enclosure

DETAILED COMMENTS
ON THE FEDERAL ENERGY REGULATORY COMMISSION
CAMERON LNG, LLC AND CAMERON INTERSTATE PIPELINE, LLC
DRAFT ENVIRONMENTAL IMPACT STATEMENT

BACKGROUND

The Federal Energy Regulatory Commission (FERC) prepared this Draft Environmental Impact Statement (DEIS) to assess the environmental impacts associated with the construction of facilities proposed by Cameron LNG, LLC and Cameron Interstate Pipeline, LLC. This project is referred to as the Cameron Liquefaction Project (Project) and consists of the Cameron LNG Terminal Expansion (Terminal Expansion) and the Cameron Pipeline Expansion (Pipeline Expansion).

Cameron proposes to construct and operate onshore natural gas liquefaction and associated facilities to allow the export of liquefied natural gas (LNG), and to construct, own, operate, and maintain a new interstate natural gas pipeline, compressor station, and ancillary facilities in Louisiana.

PROPOSED ACTION

According to Cameron, the Project would transport and liquefy domestic natural gas into LNG for export, and deliver competitively-priced LNG to foreign markets. Cameron designed its project to meet each of the following purposes:

- enable bi-directional flow of natural gas along the Cameron Interstate Pipeline system and allow natural gas to be received from five pipeline interconnections;
- allow natural gas to be received by pipeline at the expanded LNG Terminal that would be treated, liquefied, stored, and loaded from LNG storage tanks into vessels berthed at the terminal's existing marine facility;
- preserve the import and re-gasification capabilities of the Cameron LNG Terminal; and
- preserve export capability of foreign-sourced LNG at the Cameron LNG Terminal.

Terminal Expansion

Cameron LNG would construct the Terminal Expansion on a 502-acre site between Louisiana State Highway 27 (LA-27) and the Calcasieu Ship Channel, about 2 miles north of the community of Hackberry, Louisiana. The proposed site is north of and partially within the existing terminal fence line in Cameron and Calcasieu Parishes, Louisiana. The Terminal Expansion would include the following key facilities:

- three separate systems that liquefy natural gas, each capable of producing 4 million metric tons per year of LNG for export;
- a 160,000-cubic-meter, full-containment LNG storage tank;
- refrigerant make-up and condensate product storage tanks;

- a truck loading/unloading area;
- a marine work dock for delivery of equipment and construction materials;
- utilities and associated systems; and
- minor modifications to existing terminal facilities.

Pipeline Expansion

Cameron proposes to construct and operate about 21 miles of 42-inch-diameter pipeline, a compressor station (Holbrook Compressor Station) totaling about 56,820 horsepower, and associated facilities in Cameron, Calcasieu, and Beauregard Parishes, Louisiana. The pipeline would extend from an existing Cameron Interstate Pipeline interconnection at the Florida Gas Transmission (FGT) pipeline to a new interconnection with Trunkline Gas Pipeline (Trunkline). Cameron would construct and operate a new interconnection with Trunkline; modify existing interconnections and metering facilities with the Transcontinental Gas Pipeline Corporation, Texas Eastern Transmission Company, FGT, and Tennessee Gas Pipeline systems; and construct and operate associated facilities, including metering facilities, pig receivers and launchers,[2] and mainline valves.

COMMENTS

The following comments are offered for FERC's consideration in preparation of the Final EIS (FEIS).

Environmental Justice

While EPA recognizes that FERC is not one of the agencies specified in Executive Order 12898 - Environmental Justice for Low Income and Minority Populations, we appreciate that it is FERC's practice to address environmental justice in its NEPA documents. In this case, however, the DEIS does not provide any analysis to determine whether there are potentially affected low-income or minority populations, and consequently, there is no information provided to determine whether there may be disproportionate high and adverse human health or environmental effects on minority or low-income populations as result of the proposed action.

Recommendation:

EPA recommends that the Final EIS (FEIS) analyze the potential for environmental justice issues, using the methods outlined in the Council on Environmental Quality's guidance ("Environmental Justice: Guidance under the National Environmental Policy Act," December 1977), available at http://energy.gov/nepa/downloads/environmental-justice-guidance-under-nepa. The FEIS should determine whether minority and low-income populations are present that have the potential to be affected by the proposed project. As part of that analysis, for example, we recommend that the FEIS include a comparison of the demographics of the project area and suitable reference areas, like Cameron, Calcasieu and Beauregard Parishes. If potential environmental justice populations are identified, then the FEIS should determine whether there may be

disproportionate high and adverse human health or environmental impacts on these populations, and measures to address those impacts should be considered.

Air Quality

PM_{10} Emissions and Fugitive Dust Control

EPA believes it is especially important that mitigation measures include the use of best management practices for PM_{10} and fugitive dust control (e.g., gravel roads, soil wetting practices, limiting access, traffic and speed reduction). In order to further reduce potential air quality impacts, the FEIS should include a detailed Construction Emissions Mitigation Plan or more fully discuss how the existing Fugitive Dust Control Plan for construction of the project is sufficient.

Section 4.11.1 – Air Quality, Pages 4-121 and 4-122:

This section states that once the construction phase in completed, the fugitive dust and emissions would subside and would be limited. Additionally, the section states that mitigation measures employed by Cameron LNG would meet all Louisiana Department of Environmental Quality (LDEQ) requirements for construction-related vehicle exhaust emissions. EPA recommends that, in addition to all applicable local, state, or federal requirements, the following mitigation measures be included (as applicable) in a construction emissions mitigation plan or similar document in order to reduce air quality impacts associated with emissions of NOx, CO, CO_2, PM, SO_2, and other pollutants from construction-related activities:

The FEIS should more fully discuss specific actions including dust ordinances on the parish level, educational outreach tools, and tools to minimize the residents' exposure to PM_{10}, as applicable. In addition to measures included in the DEIS and all applicable local, state, or federal requirements, the EPA recommends that the following mitigation measures (as applicable) be included in the Plan in order to reduce impacts associated with emissions of PM, and other pollutants from any planned structural and non-structural activities, and possible future modifications to the roadway system:

Recommendations:

- Construction Emissions Mitigation Plan – The FEIS should include a draft Construction Emissions Mitigation Plan and ultimately adopt this plan in the Record of Decision. In addition to all applicable local, state, or federal requirements, we recommend the following control measures (Fugitive Dust, Mobile and Stationary Source and Administrative) be included (as applicable) in the Construction Emissions Mitigation Plan in order to reduce impacts associated with emissions of particulate matter and other pollutants from construction-related activities:

    - Fugitive Dust Source Controls: The FEIS should identify the need for a Fugitive Dust Control Plan to reduce Particulate Matter 10 and Fine

Particulate Matter 2.5 emissions during construction and operations. We recommend that the plan include these general commitments:

- Stabilize heavily used unpaved construction roads with a non toxic soil stabilizer or soil weighting agent that will not result in loss of vegetation, or increase other environmental impacts.
- During grading, use water, as necessary, on disturbed areas in construction sites to control visible plumes.
- Vehicle Speed
    - Limit speeds to 25 miles per hour on stabilized unpaved roads as long as such speeds do not create visible dust emissions.
    - Limit speeds to 10 miles per hour or less on unpaved areas within construction sites on un-stabilized (and unpaved) roads.
    - Post visible speed limit signs at construction site entrances.
- Inspect and wash construction equipment vehicle tires, as necessary, so they are free of dirt before entering paved roadways, if applicable.
- Provide gravel ramps of at least 20 feet in length at tire washing/cleaning stations, and ensure construction vehicles exit construction sites through treated entrance roadways, unless an alternative route has been approved by appropriate lead agencies, if applicable.
- Use sandbags or equivalent effective measures to prevent run off to roadways in construction areas adjacent to paved roadways. Ensure consistency with the project's Storm Water Pollution Prevention Plan, if such a plan is required for the project.
- Sweep the first 500 feet of paved roads exiting construction sites, other unpaved roads en route from the construction site, or construction staging areas whenever dirt or runoff from construction activity is visible on paved roads, or at least twice daily (less during periods of precipitation).
- Stabilize disturbed soils (after active construction activities are completed) with a non toxic soil stabilizer, soil weighting agent, or other approved soil stabilizing method.
- Cover or treat soil storage piles with appropriate dust suppressant compounds and disturbed areas that remain inactive for longer than 10 days. Provide vehicles (used to transport solid bulk material on public roadways and that have potential to cause visible emissions) with covers. Alternatively, sufficiently wet and load materials onto the trucks in a manner to provide at least one foot of freeboard.
- Use wind erosion control techniques (such as windbreaks, water, chemical dust suppressants, and/or vegetation) where soils are disturbed in construction, access and maintenance routes, and materials stock pile areas. Keep related windbreaks in place until the soil is stabilized or permanently covered with vegetation.

- If practicable, lease new, clean equipment meeting the most stringent of applicable Federal[1] or State Standards. In general, commit to the best available emissions control technology. Tier 4 engines should be
- used for project construction equipment to the maximum extent feasible.
- Where Tier 4 engines are not available, use construction diesel engines with a rating of 50 hp or higher that meet, at a minimum, the Tier 3 Ignition Engines[2], unless such engines are not available.
- Where Tier 3 engine is not available for off road equipment larger than 100 hp, use a Tier 2 engine, or an engine equipped with retrofit controls to reduce
- exhaust emissions of nitrogen oxides and diesel particulate matter to no more than Tier 2 levels.
- Consider using electric vehicles, natural gas, biodiesel, or other alternative fuels during construction and operation phases to reduce the project's criteria and greenhouse gas emissions.
- Plan construction scheduling to minimize vehicle trips.
- Limit idling of heavy equipment to less than 5 minutes and verify through unscheduled inspections.
- Maintain and tune engines per manufacturer's specifications to perform at EPA certification levels, prevent tampering, and conduct unscheduled inspections to ensure these measures are followed.

o Administrative controls:

- Develop a construction traffic and parking management plan that maintains traffic flow and plan construction to minimize vehicle trips.
- Identify any sensitive receptors in the project area, such as children, elderly, and the infirm, and specify the means by which impacts to these populations will be minimized (e.g. locate construction equipment and staging zones away from sensitive receptors and building air intakes).
- Include provisions for monitoring fugitive dust in the fugitive dust control plan and initiate increased mitigation measures to abate any visible dust plumes.

Greenhouse Gas (GHG) Emissions

[1] EPA's website for nonroad mobile sources is http://www.epa.gov/nonroad/.

The DEIS provides information on the potential greenhouse gas emissions associated with the terminal and pipeline expansion. However, the DEIS does not provide an assessment of the lifecycle GHG emissions associated with the proposed action.

Recommendation:

We recommend that FERC establish reasonable spatial and temporal boundaries for the analysis of GHG emissions, and that the FEIS quantify and consider the lifecycle GHG emissions associated with the proposed action. The methodologies for conducting that analysis are available and well developed; FERC could draw on good examples of lifecycle GHG emissions done in NEPA analyses by other federal agencies.

Indirect Effects

In addition to considering the direct impacts of a proposed action, NEPA requires that agencies also consider indirect effects where there is a reasonably close causal relationship between the action and the environmental effect. With regard to LNG export terminals, we note that the Energy Information Administration's overall analysis of natural gas exports found that natural gas markets in the US balance in response to increased natural gas exports largely through increased natural gas production (http://energy.gov/fe/services/natural-gas-regulation/lng-export-study). However, the DEIS does not consider the potential for increased natural gas production as a result of the proposed export terminal, or the potential for environmental impacts associated with potential increases in natural gas production.

Recommendation:

We recommend the FEIS consider the extent to which implementation of the proposed project could increase the demand for domestic natural gas extraction, as well as potential environmental impacts associated with the potential increased production of natural gas.

Wetlands

Jurisdictional Wetlands

The DEIS states that 99.2 acres of wetlands on the site are jurisdictional under the Clean Water Act Section 404. However, a revised Jurisdictional Determination (JD) for the terminal site was issued by the U.S. Army Corps of Engineers New Orleans District on December 31, 2013. According to the revised JD, there are 335 acres of jurisdictional wetlands located on the property. Construction would impact approximately 213.5 acres of jurisdictional wetlands.

Recommendation:

The FEIS should be revised to accurately quantify the impacts to jurisdictional wetlands and waters of the U.S.

Compensatory Mitigation for Wetland Impacts

Cameron LNG has proposed to mitigate for impacts to wetlands by using dredged material generated by construction of the work dock and maintenance dredging at the existing terminal berthing area to fill shallow open water and create tidal emergent marsh habitat. The DEIS states that approximately 129 acres of open water would be converted to marsh habitat as compensatory mitigation for 99.2 acres of wetland impacts.

Recommendations:

The FEIS should include a mitigation plan for all impacts to jurisdictional wetlands.

EPA requests that the FEIS include a map that identifies proposed mitigation areas, and cross-sections and target elevations for the created tidal marsh based on adjacent healthy reference marsh.

The FEIS should include a mitigation work plan and construction schedule, performance standards, monitoring and reporting plan, long-term and adaptive management plans, and long-term protection measures and financial assurances for this project.

EPA suggests that a wetland functional assessment be performed for both the impact and mitigation sites to determine that the proposed project would not result in a net loss of wetland functions in the project watershed.

EPA suggests that mitigation be conducted prior to or concurrently with the project impacts to reduce temporal loss of wetland functions.